CNSOPB

ANNUAL REPORT 2014 – 15

Leading Through Efficient, Fair & Competent Regulation

CNSOPB

CANADA-NOVA SCOTIA
OFFSHORE PETROLEUM BOARD

ATLANTIC CONDOR

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8th floor TD Centre, 1791 Barrington Street
Halifax, NS, Canada B3J 3K9

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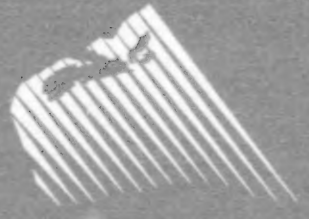


REPORT FROM CHAIR & CHIEF EXECUTIVE OFFICER

We are pleased once again to report on the activities of the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB). The 2014–15 fiscal year was one with numerous achievements for the CNSOPB, for offshore workers and for the protection of the marine environment.

One of our biggest celebrations impacts the men and women working on offshore platforms and vessels. The CNSOPB has long advocated for stronger regulations for offshore workers. As CEO and Acting Chair, we were proud to see both governments promulgate new offshore health and safety legislation. We look forward to working with both governments over the next few years to develop offshore-specific occupational health and safety regulations to replace the transitional regulations currently in place.

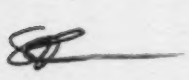
We were also pleased to see legislative changes being made to strengthen the offshore liability regime, as touched upon in the following report from the Board's Health, Safety and Environment (HS&E) Advisory Committee. The CNSOPB takes very seriously the duty to hold operators accountable to prevent and respond to possible spill events, and the legislative changes solidify and give clarity in this regard.

This year has also been one of immense preparation. With Shell Canada Limited (Shell Canada) looking to undertake deep water exploratory drilling in 2015, and BP Canada Energy Group ULC (BP Canada) proposing similar drilling in 2017, our staff has been working diligently with each operator in the rigorous authorization and approval processes. These preparations touch every aspect of the CNSOPB's mandate, and will continue through 2015–16.

Looking ahead, the 2015–16 fiscal year is already presenting a host of exciting activity. In addition to deep water drilling, the CNSOPB is anticipating other changes. Preparations are already underway for the CNSOPB to become a Responsible Authority under the Canadian Environmental Assessment Act, 2012. Furthermore, a new Call for Bids means the possibility of increased activity in other areas of Nova Scotia's offshore.

In the following pages, you will find a detailed overview of the CNSOPB's activities for the 2014–15 fiscal year. You can also find our financial statements and an audited report on the CNSOPB's finances on our website at **www.cnsopb.ns.ca/about-us/annual-report**.

Sincerely,



STUART PINKS
Chief Executive Officer

TIM BROWNLOW
Acting Chair

REPORT FROM CHAIR OF HEALTH, SAFETY & ENVIRONMENT (HS&E) ADVISORY COMMITTEE

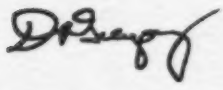
The 2014-2015 fiscal year was a busy and productive one for the CNSOPB's HS&E Advisory Committee. The Committee met six (6) times during the period providing oversight with respect to the health and safety of offshore workers and protection of the environment.

The Committee sought the necessary assurances that the HS&E regulatory framework governing the ongoing operations at the Sable Offshore Energy Project operated by ExxonMobil Canada, and Encana Corporation's Deep Panuke Offshore Gas Project, has been effectively implemented by Board staff. In addition, the Committee sought similar assurances in relation to the geophysical and geotechnical activity undertaken by BP Canada and Shell Canada in their respective exploration licence areas. In doing so, the Committee ensured that operators are held accountable to consistently achieve high standards of health, safety and environmental performance when carrying out their work, and that any concerns that arise are appropriately dealt with in a timely manner.

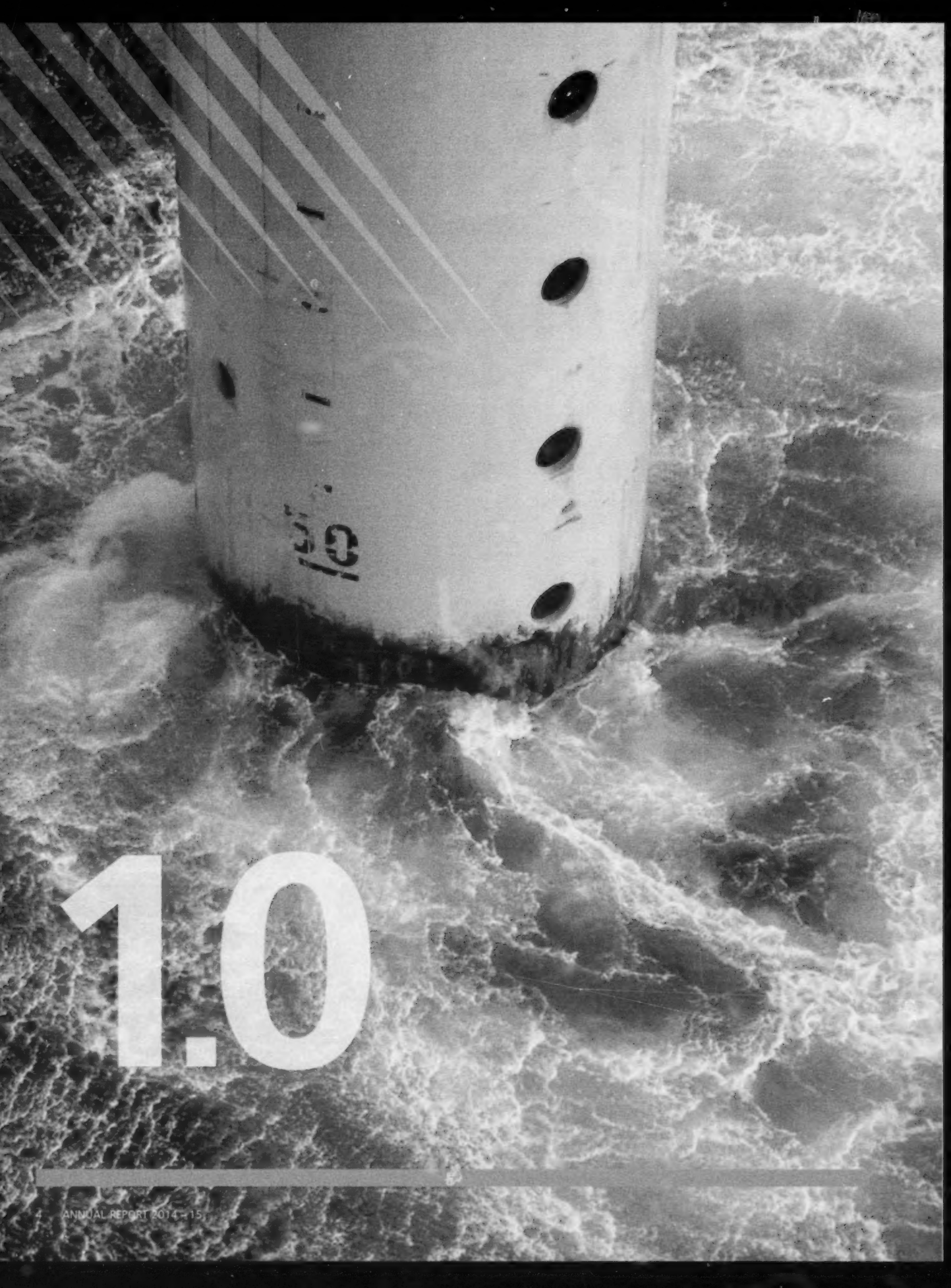
While the above offshore activity was underway, a number of legislative changes were promulgated by governments during the fiscal year. The governing federal and provincial legislation was amended to clarify and improve upon the current manner in which occupational health and safety in our offshore area is regulated. The amendments added occupational safety and health requirements to the Accord Acts, and specified duties for all operators, owners, working interest holders, corporate officials, employers, supervisors, suppliers, and employees. By updating the legislation, the governments have further protected the right to a safer workplace for all offshore workers.

In addition, other legislative amendments are being made both federally and provincially to strengthen offshore liability legislation. The legislative changes that have been tabled enshrine the "polluter pays" principle into law by implementing an absolute liability limit of $1 billion for offshore petroleum companies engaged in drilling or production. It also maintains and reinforces that liability is unlimited where fault or negligence is proven. These changes provide greater assurance that only those companies with resources adequate to prevent and respond to incidents are active in Nova Scotia's offshore.

These legislative changes, coupled with updates to CNSOPB guidelines, support continued improvement of Nova Scotia offshore activity regulation. The Committee looks forward to benefitting from these changes as it strives to ensure that offshore petroleum operations are conducted in a manner that best protects the health and safety of offshore workers and the environment in which they work.



DOUG GREGORY
Chair, HS&E Advisory Committee



1.0

1.0 CORE REGULATORY RESPONSIBILITES

The CNSOPB's core regulatory responsibilities span the full lifecycle of offshore activities, including resource assessments, exploration, development, production and abandonment. The CNSOPB's mission, vision and mandate align with these responsibilities.

1.1 CNSOPB MISSION, VISION & MANDATE

Mission

The efficient, fair and competent regulation of exploration and production activities enabling safe and responsible development of Nova Scotia's offshore petroleum resources.

Vision

The CNSOPB is respected both locally and internationally for its proficient regulation of offshore petroleum activities providing high benchmarks for others to emulate.

Mandate

To apply the provisions of federal-provincial Accord Act legislation governing offshore oil and gas activities, including:

- Health and safety of workers;
- Protection of the environment;
- Management and conservation of petroleum resources;
- Canada-Nova Scotia employment & industrial benefits;
- Issuance of licences for exploration & development; and
- Resource evaluation, data collection, curation & distribution.

Organizational decision making is structured in a manner that recognizes safety as paramount and environmental protection as second only to safety.

1.2 KEY ACCOUNTABILITIES

The following describes the CNSOPB's key accountabilities in fulfilling its core regulatory mandate as described above.

Health & Safety of Workers

- To advance health and safety of offshore workers.
- To determine the readiness of operators to conduct offshore activities in a safe and compliant manner when considering authorization and approval applications from operators.
- To monitor operations for compliance with applicable regulatory requirements including health and safety management systems and plans, authorization and approval conditions, and operator commitments.

Protection the Environment

- To advance protection of the environment.
- To determine the readiness of operators to conduct offshore activities in an environmentally responsible and compliant manner when considering authorization and approval applications from operators.
- To monitor operations for compliance with applicable regulatory requirements including environmental management systems and plans, authorization and approval conditions, and operator commitments.

Management & Conservation of Petroleum Resources

- To advance conservation of offshore petroleum resources.
- To determine the readiness of operators to conduct offshore activities in a manner that will allow for a comprehensive evaluation of all petroleum resources, and additionally that production activities will optimize recovery of petroleum resources, when considering authorization and approval applications from operators.
- To monitor operations for compliance with applicable regulatory requirements including relevant resource evaluation and reservoir management systems and plans, authorization and approval conditions, and operator commitments.

Canada-Nova Scotia Employment & Industrial Benefits

- To assess Canada-Nova Scotia Benefits Plans, and monitor resulting activities, for compliance with applicable regulatory requirements and operator commitments.

Compliance Enforcement

- To take necessary enforcement actions so that non-compliances with regulatory requirements are corrected by operators.

Issuance of Licences for Exploration & Development

- To manage licencing of lands in compliance with regulatory requirements for interests.

Resource Evaluation, Data Collection, Curation & Distribution

- To build and develop a knowledge base of the Nova Scotia offshore area through the collection, curation, interpretation and dissemination of data from exploration and production activity.

1.3 STRATEGIC DIRECTION

The CNSOPB has identified a number of initiatives, aligning with the following three (3) strategic priority areas, to enhance the delivery of its regulatory mandate:

- Organizational Excellence;
- Optimizing Regulatory Processes; and
- Proactive Communication/Stakeholder Relations.

Significant progress was made in each of these areas of the reporting period as summarized below.

1.3.1 ORGANIZATIONAL EXCELLENCE

The CNSOPB continued to build and maintain the technical competencies of its staff, and to provide the tools necessary for them to effectively complete their work. Highlights include:

- Given the upcoming drilling programs for Shell Canada and BP Canada, and also the eventual decommissioning of the Sable Offshore Energy Project facilities, a need to improve upon or develop new technical skills was identified. Staff are working on an ongoing basis to upgrade skills in areas such as deep water drilling, emergency response, oil spill response, well control, contingency planning, and decommissioning practices.
- Additionally, enhancements continue to be made to CNSOPB'S internal training programs specific to the Occupational Health and Safety Officers, Operational Safety Officers and Conservation Officers, taking into account recent legislative changes.
- The tendering process to procure new geoscience software and related hardware utilized by the CNSOPB Resources department was completed in March 2015. The new software is expected to fully installed and configured by June 2015. It is used by CNSOPB's geoscientists to conduct geoscience studies (e.g. Call for Bids geoscience information packages) and resource assessments to enable a better understanding of the geology and hydrocarbon potential of the Nova Scotia offshore area.
- A total of three (3) internal assurance audits of CNSOPB management system processes were conducted using external auditing specialists provided by Deloitte.
- The roll-out of a new electronic document and records management system continues. When fully implemented organization wide, this system will better standardize how CNSOPB information is maintained and accessed, and should result in significant administrative efficiencies.

1.3.2 OPTIMIZING REGULATORY PROCESSES

CNSOPB Regulatory Practices

With the Shell Canada drilling program targeted to commence in 2015, the CNSOPB further advanced its action plan developed in the previous fiscal year to assure the CNSOPB's continuing readiness to regulate such deep water drilling activity. Key preparatory actions taken included:

- Implementation of a requirement for an independent well examination scheme applicable to operators' proposed well design and construction programs. This will provide additional assurance that a drilling program can be executed safely.
- Identification and communication of additional expectations with respect to operators' emergency preparedness and response plans (including spill response plans).
- Enhancements to CNSOPB emergency preparedness and response plans. During 2014–15, CNSOPB participated in a table top emergency response exercise organized by Natural Resources Canada, and initiated preparations for a major emergency response exercise to be held by Shell Canada in April 2015, ahead of their upcoming drilling program.
- A number of Memoranda of Understanding were developed or updated with other federal agencies that the CNSOPB could call upon for assistance and expertise in the case of an offshore emergency, including a major spill (see additional detail at the end of this section).

A strategic plan was developed to guide CNSOPB staff in its oversight of projects that are nearing the end of their productive field life, taking into account both reservoir management and asset integrity aspects. This plan includes reservoir engineering studies and analysis such as reservoir simulation modeling, decline curves and material balance analysis. The plan has been designed to ensure that operators are held accountable to maximize the economic recovery of hydrocarbons from each producing field, while minimizing the risk of premature decommissioning and abandonment of offshore facilities due to asset integrity concerns.

The federal government has indicated its plan to reinstate the CNSOPB as a Responsible Authority under the Canadian Environmental Assessment Act, 2012 (CEAA 2012). In anticipation, the CNSOPB has undertaken a number of preparations which include:

- The creation of a Participant Funding Program. Through this program, financial assistance can be provided to eligible individuals, organizations and Aboriginal groups who wish to participate by providing value added input into an Environmental Assessment (EA) conducted under CEAA 2012.
- Conducting an internal review of existing practices, and engaging with government representatives to define roles and responsibilities regarding Aboriginal consultation as it relates to offshore oil and gas activities.

Legislation / Regulations

CNSOPB staff continued to provide support to the federal and provincial governments as they promulgated Occupational Health and Safety (OHS) Accord Acts amendments, along with transitional OHS regulations that will remain in effect until offshore-specific regulations have been developed. The legislative amendments and transitional regulations came into force on December 31, 2014. Training programs specific to the new Occupational Health and Safety officer designations were conducted. The CNSOPB is enforcing the new OHS regime through established compliance monitoring and enforcement activities.

1.0

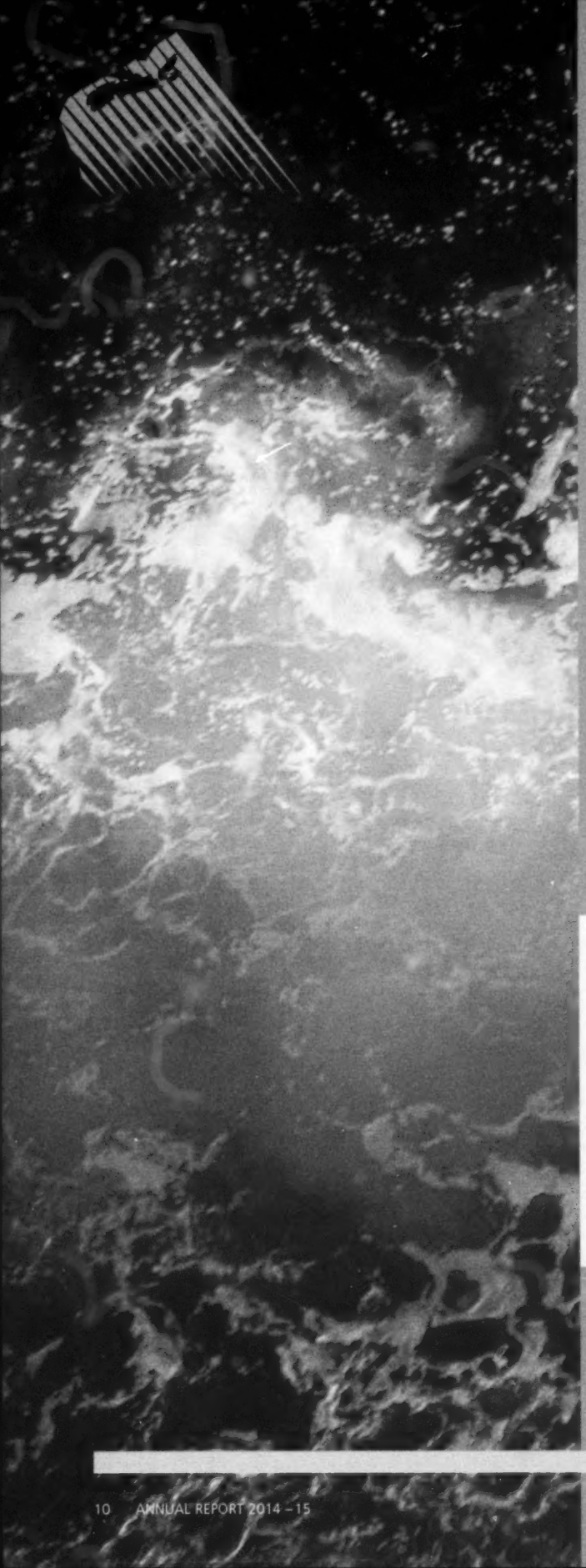
CNSOPB staff assisted governments in advancing other legislative amendments, and in the development of regulations and other associated instruments applicable to offshore oil and gas activities, including:

- Drafting of new, offshore-specific OHS Regulations, which includes Diving Regulations;
- Drafting of provisions included in the federal government's Energy Safety and Security Act, along with the associated regulations addressing administrative monetary penalties, financial requirements and cost recovery;
- Drafting of a new Framework Regulation that will eventually replace regulations currently in place for drilling and production, installations, certificate of fitness, and geophysical operations; and
- Consideration of potential changes to land tenure provisions contained in the Accord Acts.

CNSOPB Guidance Documents

- In conjunction with the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB), Atlantic Canada Standby Vessel Guidelines were finalized and issued. The working group struck to develop these guidelines included representation from the CNSOPB, C-NLOPB, National Energy Board (NEB), Canadian Association of Petroleum Producers (CAPP), vessel owners and classification societies. Representatives of Transport Canada, Marine Safety and Security also provided advisory services. These guidelines were required because Transport Canada repealed their Standards Respecting Standby Vessels, which for a number of years had been in need of updating.

- A major revision to the CNSOPB's Geophysical, Geological, Geotechnical and Environmental Program Guidelines clarifying and standardizing program authorization and reporting requirements for geological and geophysical exploratory work, seabed surveys, and environmental programs was completed and issued for use.



- A joint CNSOPB / C-NLOPB / NEB Statement on Safety Culture was released. This Statement promotes learning and a shared understanding of safety culture across the oil and gas sector in Canada. It also expresses the CNSOPB's expectations of regulated companies to build and sustain a positive safety culture, and it defines actions that the CNSOPB intends to take as part of its ongoing commitment to the advancement of safety culture. A positive safety culture within operating companies is critical in driving continuous improvement in safety and environmental performance, and to reducing the risk of incidents.

- Work commenced on the preparation of guidance to be issued to operators to ensure that any future geophysical exploration activities that may be authorized to take place in the new Sable Island National Park Reserve would be low impact.

A positive safety culture within operating companies is critical in driving continuous improvement in safety and environmental performance, and to reducing the risk of incidents.

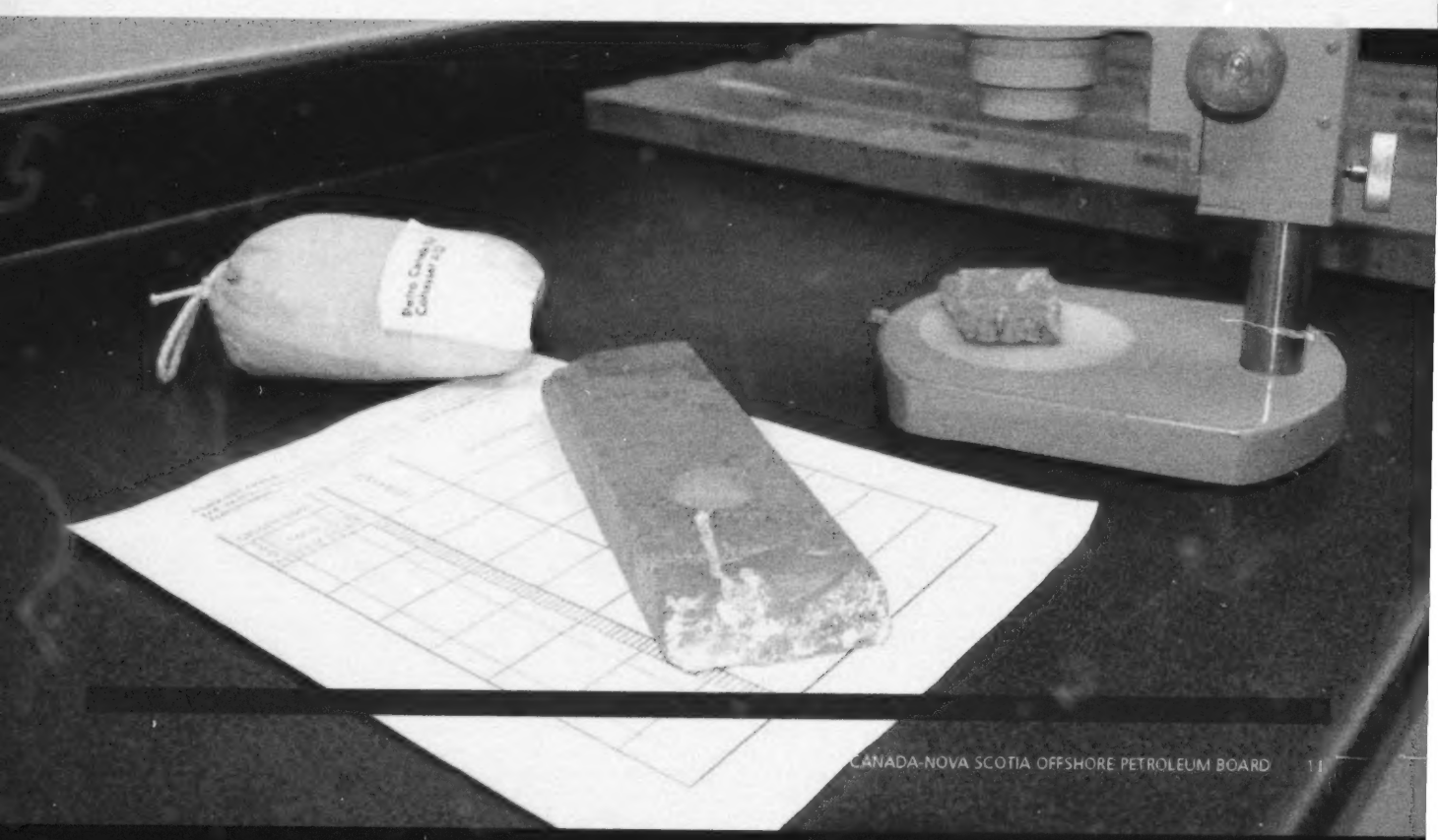
Memoranda of Understanding (MOU)

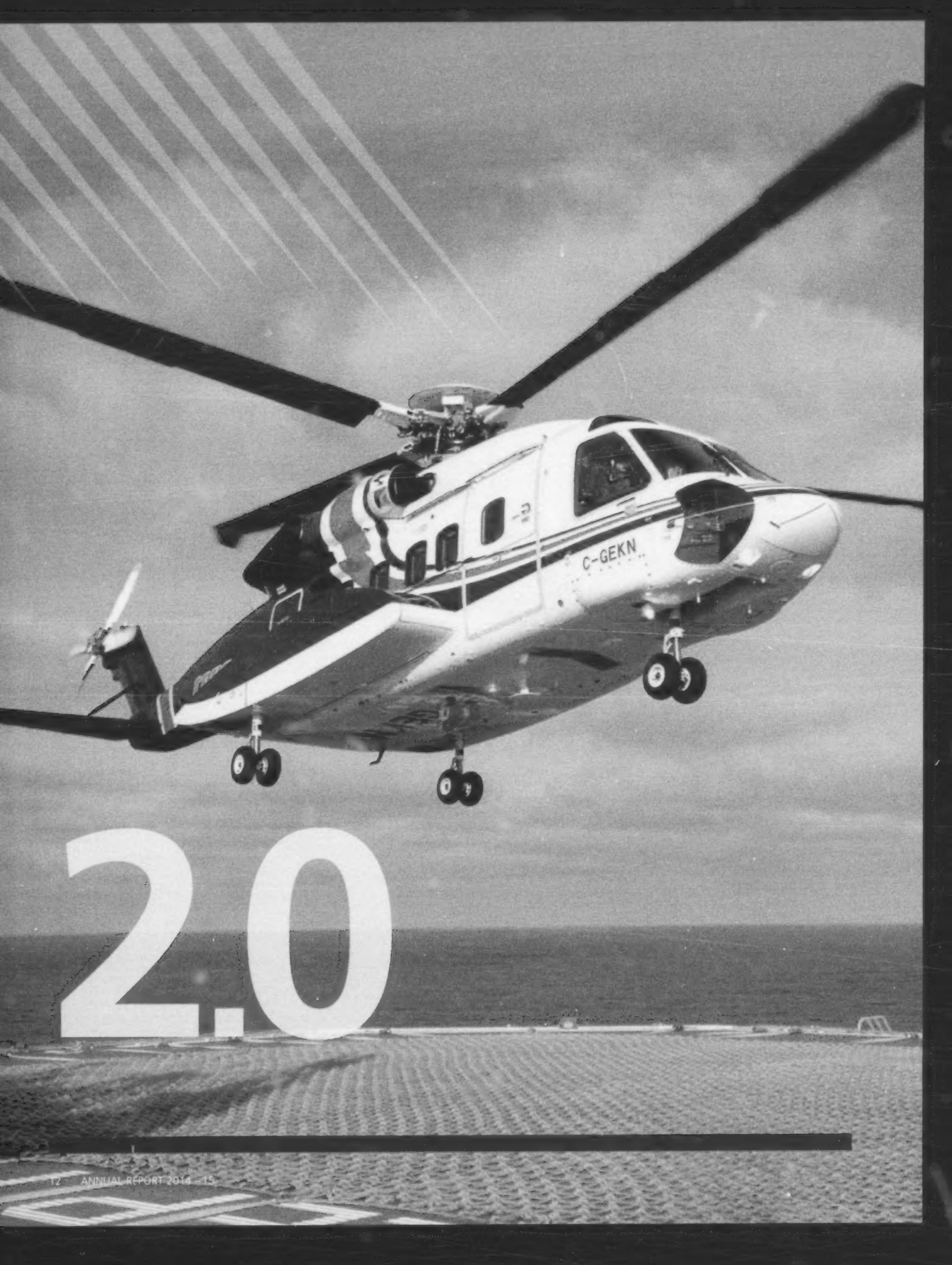
The following MOUs have been updated or developed. The primary driver behind these efforts was to further clarify roles and responsibilities in terms of oil spill preparedness and response, as well as to ensure that resources and expertise can be made available to the CNSOPB as lead agency in its regulatory oversight role of offshore oil and gas operations with:

- Canadian Coast Guard (new MOU completed)
- Fisheries and Oceans Canada (update to existing MOU completed addressing, among other things, marine environmental protection and conservation)
- Environment Canada (update to existing MOU addressing, among other things, environmental protection and conservation, spill response, and reference to the Integrated Satellite Tracking of Pollution program)
- Transport Canada, Marine Safety and Security (update to existing MOU to add reference to National Aerial Surveillance Program)
- The Canada – Newfoundland & Labrador Offshore Petroleum Board
- The NEB (new MOU addressing cooperation and coordination of activities related to safety, security, environment, resource conservation and emergency response)

1.3.3 PROACTIVE COMMUNICATION & STAKEHOLDER RELATIONS

The CNSOPB found a number of opportunities to speak publicly to its mandate, as well as to the CNSOPB's preparations to regulate deep water drilling activity. The CNSOPB also made significant changes to its emergency communications protocols to better optimize the dissemination of timely information to stakeholders (including the public).





2.0

SUMMARY OF OFFSHORE WORK & ACTIVITIES

2.0

No work or activity related to the exploration for, development of, or transportation of petroleum can be conducted without a specific authorization issued by the CNSOPB.

Prior to issuing any such authorizations, the CNSOPB requires that the following be submitted in a satisfactory form:

- Development Plan (for development-related activities);
- Summary of Proposed Operations;
- Safety Plan;
- Certificate of Fitness (where applicable);
- Environmental Assessment;
- Environmental Protection Plan;
- Emergency Response, Spill Response & Contingency Plans;
- Canada-Nova Scotia Benefits Plan;
- Financial Security; and
- Declaration of Operator.

Figure 1 on page 15 provides a summary of work and activity authorization applications that were submitted and approved between April 1 and March 31 over the last four (4) fiscal years.

Deep Panuke (Operator: Encana):

Deep Panuke has been in production since August, 2013 when the CNSOPB issued an Operations Authorization – Production. Throughout the year, daily operational and production reports were received and reviewed, and staff from the CNSOPB and Encana met monthly for operational status meetings (and more frequently if required to address specific issues). CNSOPB staff conducted regular audits and inspections at the Production Field Center and onboard vessels, and followed up on all reported incidents. Furthermore, CNSOPB staff has developed an independent reservoir simulation model of the Deep Panuke field to better assist in reservoir management oversight of the project to ensure that waste of hydrocarbon resources does not occur. CNSOPB staff met with the Encana reservoir management team, on a regular basis, to review reservoir management strategies and discuss well performance. In order to maximize production and enhance well performance from the Panuke M-79A and Margaree F-70 wells, Encana conducted a number of well stimulation programs that were subject to regulatory oversight by CNSOPB staff.

Sable Offshore Energy Project (Operator: ExxonMobil Canada):

Production of natural gas continued from Sable Offshore Energy Project's (SOEP) five fields (Thebaud, Venture, South Venture, Alma and North Triumph) under an Operations Authorization – Production granted by the CNSOPB. Throughout the year, daily operational reports were received and reviewed, and staff from the CNSOPB and ExxonMobil Canada met bi-monthly for operational status meetings (and more frequently if required to address specific issues). CNSOPB staff conducted regular audits and inspections at the various offshore workplaces, and followed up on all reported incidents. CNSOPB staff met with the SOEP reservoir management team to review reservoir management strategies and discuss well performance. Additionally, CNSOPB staff has been monitoring ExxonMobil Canada's planning for eventual decommissioning of the project to ensure that commitments made in the approved Development Plan will be upheld, that regulatory requirements and expectations are understood, and to identify and plan for the various regulatory interfaces and submissions that will be required.

Shell Canada (Exploration Licence):

Shell Canada conducted a geohazard survey of the sedimentary layers within a few hundred metres of the seafloor. This survey was conducted over the prospective exploratory drilling locations on their Exploration Licences in the Shelburne Basin. This survey was completed in the early fall of 2014. In advance of granting an authorization to Shell Canada to carry out this work, CNSOPB staff reviewed documentation submitted in support of Shell Canada's application to ensure that it satisfactorily demonstrated that the program could be carried out safety and in a manner fully compliant with regulations. CNSOPB staff also conducted pre-authorization inspections of the vessels to be used to complete this work. Once the authorization was granted by the CNSOPB, staff regularly monitored the offshore work activity, conducted audits and inspections as necessary, and followed up on any incidents reported.

CNSOPB staff also commenced its review of documentation relating to Shell Canada's upcoming application for an Operations Authorization – Drilling, along with the associated Approval to Drill a Well applications for two (2) exploratory wells within their Shelburne Basin Exploration Licences. In December 2014, CNSOPB technical staff visited the drillship that will be carrying out this work, the Stena Ice Max, which was actively drilling at that time in the Gulf of Mexico.

Also, CNSOPB staff have been supporting the Canadian Environmental Assessment Agency in completing the EA of the proposed exploratory drilling program. This EA must be completed ahead of any authorizations the CNSOPB may grant in relation to the execution of Shell Canada's planned exploratory drilling program.

BP Canada (Exploration Licence):

BP Canada completed a wide azimuth 3D seismic survey of over 7000 km² on their deep water Exploration Licence blocks on the central Scotian Slope. This survey was completed in early fall of 2014. In advance of granting an authorization to BP Canada to carry out this work, CNSOPB staff reviewed documentation submitted in support of BP Canada's application to ensure that it satisfactorily demonstrated that the program could be conducted safety and in a manner fully compliant with regulations and EA commitments, and completed certain pre-authorization surveys of the vessels to be used. Once the authorization was granted, staff regularly monitored the offshore work activity that was carried out, conducted audits and inspections as necessary, and followed up on any incidents reported.

The CNSOPB and BP Canada began discussions on regulatory requirements and expectations with respect to BP's exploratory drilling program currently proposed for 2017.

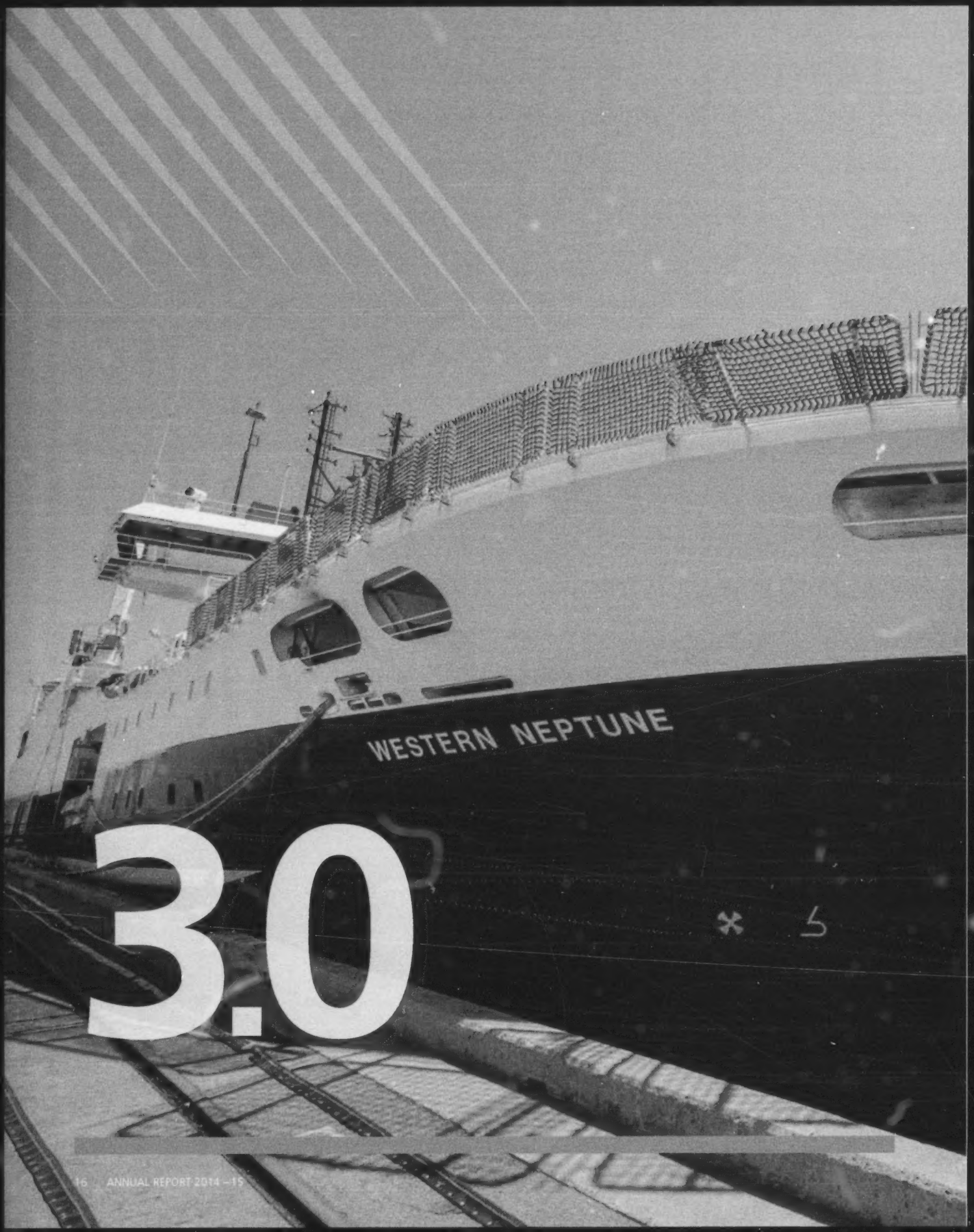
CNSOPB staff reviewed documentation submitted in support of BP Canada's application to ensure that it satisfactorily demonstrated the program could be conducted safety in a manner fully compliant with regulations and environmental assessment commitments, and completed certain pre-authorization surveys of the vessels to be used.

2.0

FIGURE 1:
SUMMARY OF OFFSHORE WORK & ACTIVITIES

WORK OR ACTIVITY APPROVED	NUMBER OF APPLICATIONS APPROVED			
	2011 – 12	2012 – 13	2013 – 14	2014 – 15
GEOPHYSICAL / GEOTECHNICAL / GEMCHEMICAL				
Geophysical / Geological Work Authorization	–	–	1	1
Geotechnical / Geological/Engineering / Environmental Program Authorization	3	–	–	1
DRILLING				
	–	–	–	–
INSTALLATION				
Operations Authorization – Install	2	–	–	–
PRODUCTION				
Operations Authorization – Production	–	–	1	–
Operations Authorization – Production Renewal	–	–	1	–
Well Approval: Approval to Alter the Condition of a Well	–	2	2	–
DIVING				
Diving Program Authorization	1	–	1	1
TOTAL	6	2	6	3

The CNSOPB has in place an effective monitoring program to evaluate operator compliance with regulatory requirements while conducting authorized petroleum related work activities. Operators are required to submit reports uetailing the status of their work programs on an ongoing basis, along with other documentation to demonstrate compliance with regulatory requirements. Additionally, CNSOPB staff regularly visit offshore worksites to perform audits and inspections (a summary of which can be found on our website at: cnsopb.ns.ca/health-and-safety/compliance-and-enforcement, and to follow up on incidents reported. In cases where noncompliance to regulatory requirements is identified, the CNSOPB's compliance and enforcement actions that may be taken include: seeking of voluntary compliance, issuance of orders or directives, cancellation or suspension of authorizations or approvals and potentially prosecution through the court system.



3.0

3.0 HEALTH, SAFETY & ENVIRONMENTAL PROTECTION

3.1 SAFETY PLANS

All operators applying to the CNSOPB to conduct petroleum activities in the Nova Scotia offshore area must submit prescribed safety-related documentation, including a safety plan, for review. The safety plan establishes the procedures, practices, resources and monitoring measures necessary to ensure the safety of a proposed project or activity.

Safety Officers thoroughly reviewed safety plans and related documentation for acceptability, prior to the CNSOPB's granting of an authorization for each of the activities listed in Section 2.

3.2 SAFETY PERFORMANCE

Operators are required to report health and safety-related incidents to the CNSOPB, as and when they occur. For each reported incident, the CNSOPB verifies that the operator has taken the appropriate actions to determine the cause of the incident and to prevent its recurrence. The CNSOPB reviews this information, as well as information from other independent sources, to determine possible trends and commonalities, and to identify specific target areas for improvement. More significant incidents may also be investigated independently by CNSOPB staff.

3.2.1 INJURY STATISTICS

In 2014–15, there were 1,296,335 person hours worked under CNSOPB authority in the Nova Scotia offshore area. During that period, there were 3 disabling injuries. CNSOPB Safety Officers investigated each of these incidents to ensure that corrective actions have been taken. Disabling injury statistics are tabulated in **Figure 2** on the next page.

Safety Officers thoroughly reviewed safety plans and related documentation for acceptability, prior to the CNSOPB's granting of an authorization for each of the activities listed in Section 2.

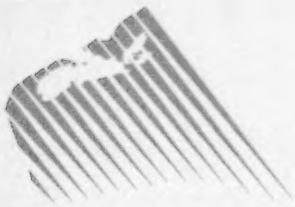


FIGURE 2:
DISABLING INJURY STATISTICS (2014–15 FISCAL YEAR)

	2010 – 11	2011 – 12	2012 – 13	2013 – 14	2014 – 15
NUMBER OF DISABILING INJURIES [1]					
Installations	2	0	3	1	3
Vessels	1	0	1	3	0
Aviation	0	0	0	0	0
TOTAL	**3**	**0**	**4**	**4**	**3**

	2010 – 11	2011 – 12	2012 – 13	2013 – 14	2014 – 15
PERSON HOURS					
Installations	450,857	549,116	716,272	562,584	526,440
Vessels	403,868	413,729	268,529	591,084	735,992
Aviation	45,124	22,542	24,301	28,177	8,421
TOTAL	**899,849**	**985,387**	**1,009,102**	**1,181,845**	**1,296,335**

	2010 – 11	2011 – 12	2012 – 13	2013 – 14	2014 – 15
FREQUENCY RATE (PER 200,000 PERSON HOURS)					
Installations	1.45	0.89	0	0.36	1.14
Vessels	0.75	0.5	0	1.02	0
Aviation	0.00	0	0	0	0
TOTAL	**0.97**	**0.67**	**0**	**0.79**	**0.46**

(1) The term "disabling injury" means an employment injury or an occupational disease that (a) prevents an employee from reporting for work or from effectively performing all the duties connected with the employee's regular work on any day subsequent to the day on which the disabling injury occurred, whether or not that subsequent day is a working day for that employee, (b) results in a loss by an employee of a body member or part thereof or in a complete loss of its usefulness, or (c) results in the permanent impairment of a body function of an employee.

Note: For quality assurance, minor adjustments to person hours may periodically be adjusted to reflect Operator amendments.

3.3 ENVIRONMENTAL ASSESSMENTS

3.3.1 STRATEGIC ENVIRONMENTAL ASSESSMENTS

Prior to issuing Explorations Licences in new offshore areas, the CNSOPB conducts Strategic Environmental Assessments to ensure that specific environmental issues that may exist are known ahead of irrevocable decisions that may be taken by the CNSOPB and by potential bidders. CNSOPB staff initiated the process for a Strategic Environmental Assessment in the Sydney Basin/Orpheus Graben areas in early 2015. This area is targeted for a Call for Bids for Exploration Licences in 2017.

3.3.2 PROJECT SPECIFIC ENVIRONMENTAL ASSESSMENTS

The CNSOPB requires that an EA is conducted for all proposed exploration and production activities. In cases where an EA is not required pursuant to the Canadian Environmental Assessments Act 2012 such EAs are conducted under analogous CNSOPB established processes.

During the 2014–15 fiscal year, two (2) EAs were completed or are currently underway. The EA for BP Canada's seismic program was completed in the spring of 2014. This program took place from May to September, 2014.

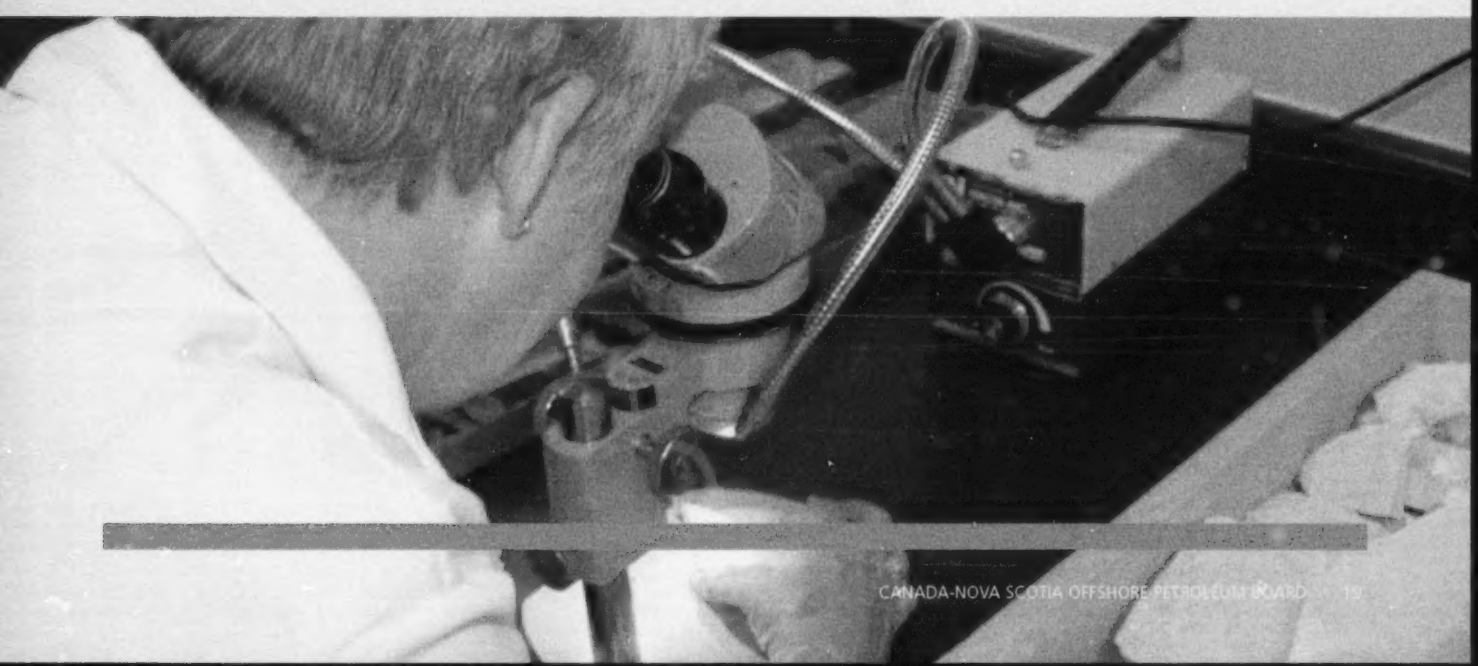
An addendum was created for the existing EA for Shell Canada's Shelburne seismic program addressing the seabed survey conducted during the summer and late fall of 2014. The CNSOPB has also been assisting the Canadian Environmental Assessment Agency in its completion of an EA for the exploration drilling program proposed by Shell Canada, which is scheduled to commence in 2015.

3.4 ENVIRONMENTAL PROTECTION PLANS & SPILL RESPONSE PLANS

CNSOPB staff are currently reviewing the Environmental Protection Plan and Spill Response Plan for the above mentioned exploration drilling program. All Spill Response Plan for current operators are publicly available on the CNSOPB's website.

3.5 ENVIRONMENTAL EFFECTS MONITORING

Environmental Effects Monitoring for offshore petroleum activities in the Nova Scotia Offshore involves scientific monitoring of the effects of petroleum activities on specific components of the surrounding environment. The results of the Environmental Effects Monitoring programs are submitted to the CNSOPB for review in the first quarter of each year. These reports are provided to Fisheries and Oceans Canada and Environment Canada for review and advice.



3.6 SPILLS TO THE SEA

Regulations provide that all spills and releases are to be reported to the CNSOPB and other applicable government departments. The CNSOPB reviews and/or investigates potential environmental impacts of each spill and accidental release. It also monitors spill occurrences to determine if any trends are occurring. Environmental concerns include the potential impact of petroleum products on seabirds and the impact of spills on the marine habitat.

There were six (6) spills to the ocean and two (2) gas releases reported during the 2014–15 fiscal year.

Figure 3 below categorizes the spills to the sea.

3.7 COMMISSIONER OF ENVIRONMENT & SUSTAINABLE DEVELOPMENT AUDIT

In the fall of 2012, the Auditor General of Canada's Commissioner of Environment & Sustainable Development tabled an audit report examining the regulation of Atlantic offshore oil and gas activities. Specifically, it looked at how the two offshore petroleum boards (the CNSOPB and the C-NLOPB) were managing the environmental risks and impacts associated with offshore oil and gas activities.

The audit concluded that both boards were managing the environmental impacts associated with oil and gas activities in Canada's Atlantic offshore areas in a manner consistent with the size and scale of operations in those regions. The report also included ten recommendations applicable to the CNSOPB (along with other responsible parties). Significant efforts have been made in addressing these recommendations, much of which has been focused on ensuring readiness to regulate upcoming oil exploration, with deep water drilling by Shell Canada targeted to commence later in 2015. A link to a copy of the Commissioner of Environment & Sustainable Development's audit report, a table summarizing its recommendations, and the CNSOPB's resultant actions, can be found on our website at **cnsopb.ns.ca**.

FIGURE 3:
SPILLS TO THE SEA

MATERIAL	LESS THAN 1L	1 – 10L	11 – 150L	GREATER THAN 150L	TOTAL
Hydraulic Oil	1	1	–	1	3
Diesel	–	–	–	1	1
Condensate	2	–	–	–	2
Light Oil	–	–	–	–	–
TOTAL	3	1	–	2	6

Note: Does not include minor exceedences to authorized discharge limits (e.g. oil in produced water) or gas releases.

3.0

Prior to issuing Explorations Licences in new offshore areas, the CNSOPB conducts Strategic Environmental Assessments to ensure that specific environmental issues that may exist are known ahead of irrevocable decisions that may be taken by the CNSOPB and by potential bidders.

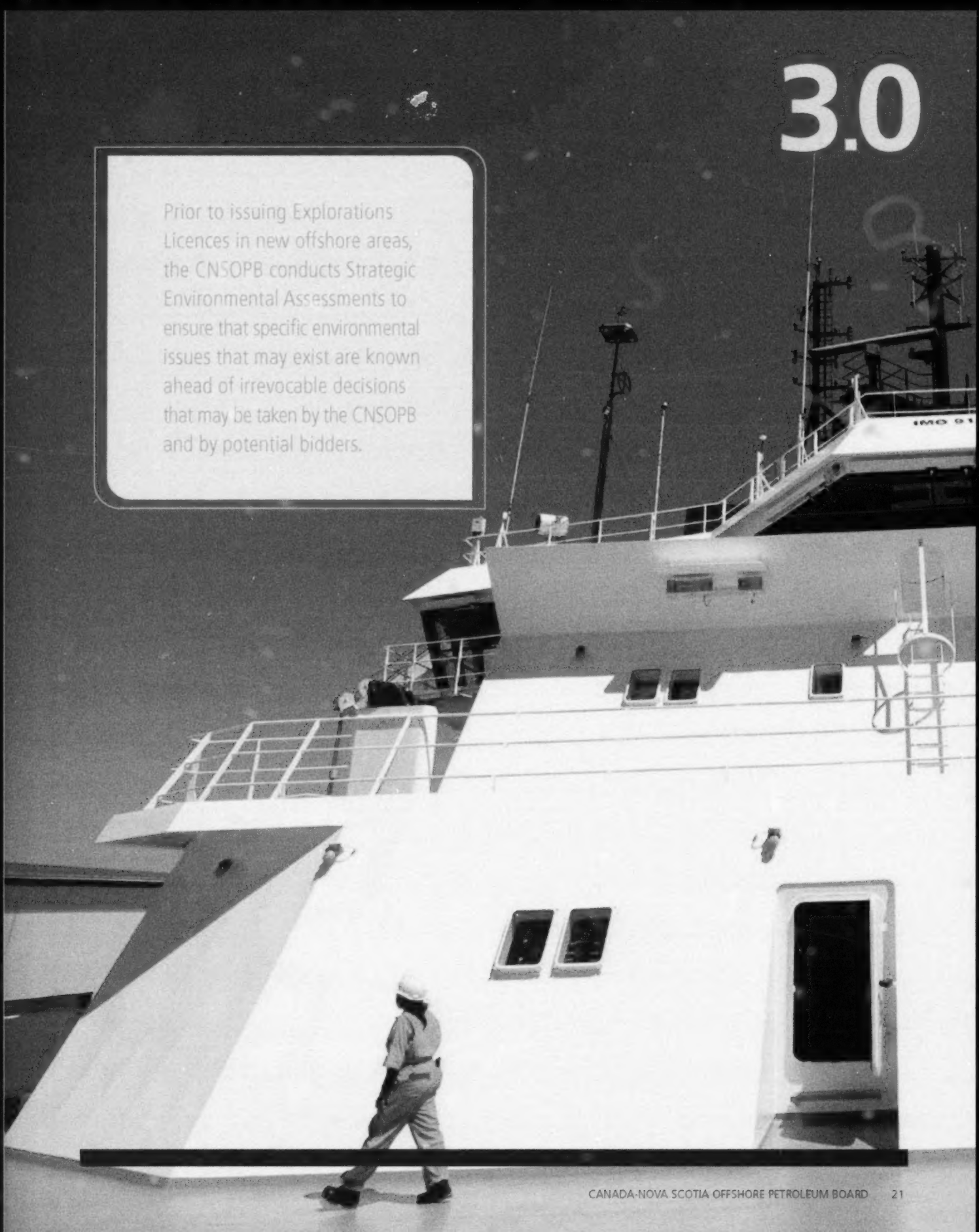
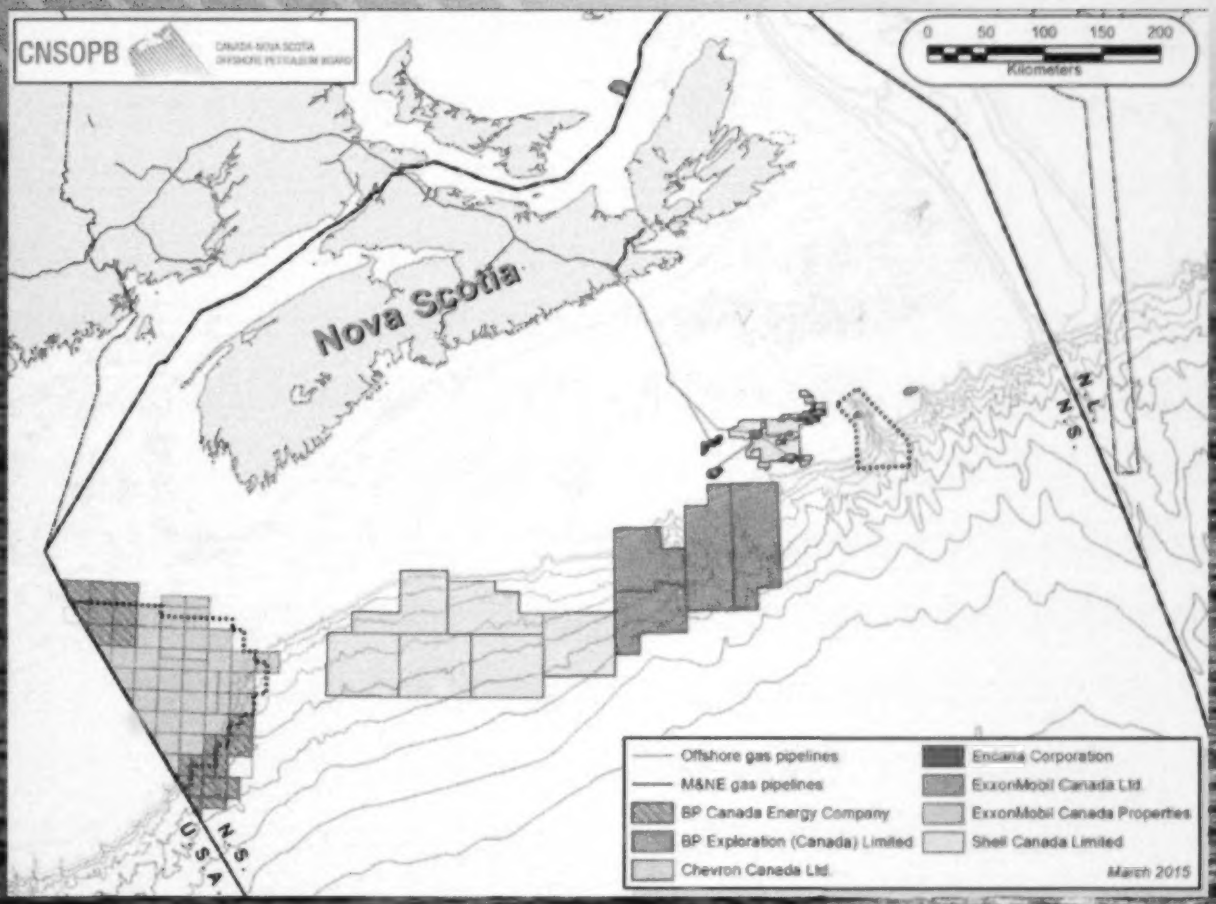


FIGURE 4: ACTIVE LICENCES



4.0

RIGHTS MANAGEMENT 4.0

The rights issuance, or licensing policy, is governed by Part II of the Accord Acts, which is based on the Canadian Petroleum Resources Act model.

Annually, the CNSOPB's anticipated decisions respecting the making of a call for bids and the terms and conditions of the resulting licences are sent to the federal and provincial governments in the form of the CNSOPB's annual Strategic Plan for interests, exploration and development.

4.1 CALLS FOR BIDS

A Call for Bids is a formal announcement by the CNSOPB that a licence is available to be awarded through a competitive bidding process. The land in which the licence is available for bidding has been nominated by industry or posted by the CNSOPB.

Nominations are reviewed on December 1 of each year for consideration for the Call for Bids announced in April of the following year. The CNSOPB has outlined Call for Bids Forecast Areas on a rolling three (3) year basis, which can be found on the CNSOPB's website.

Call for Bids NS14-1

Call for Bids NS14-1 was announced on May 5, 2014 and closed on October 30, 2014. No bids were received.

This Call consisted of four (4) offshore parcels on the eastern Scotian Slope. CNSOPB staff prepared an in-depth regional and subregional geological and geophysical analysis of each parcel. This information was made available through the CNSOPB's website.

4.2 ACTIVE LICENCES

Figure 4 shows active licences offshore Nova Scotia as of March 31, 2015. Additional maps, tables and information about all active licences offshore Nova Scotia can be found on the CNSOPB's website.

There were no changes to the number of Exploration Licences this fiscal year. As of March 31, 2015, there were twelve (12) active Exploration Licences for offshore Nova Scotia, with total original work expenditure bids of approximately $2,051,853,227.00. The twelve (12) Exploration Licences cover an area of 3,531,112 hectares.

There were no changes to the number of Significant Discovery Licences or Production Licences this fiscal year.

5.0

RESOURCES

5.0

5.1 SABLE OFFSHORE ENERGY PROJECT

CNSOPB staff are continuing to monitor daily production and reservoir performance from the Sable Offshore Energy Project (SOEP) fields to ensure effective reservoir management strategies are in place. During the reporting period, staff reviewed the annual updates to the SOEP Reservoir Management Plan and Gas in Place Report. SOEP's measurement system is monitored on an ongoing basis to ensure compliance with regulatory requirements. In addition, the CNSOPB staff conducted an audit of the well and field surveillance aspects of SOEP's Management System.

During the reporting period, SOEP's average daily production rate was unchanged from the previous fiscal year at 4.1 E6m3/d (144 MMscf/d). Total SOEP gas production to March 31, 2015 was 55.7 E9m3 (Billion Cubic Metres) or 1.97 Tcf (Trillion Cubic Feet). Total yearly production for each SOEP field is shown in **Figure 5**. The average gas rate for each SOEP field is shown graphically in **Figure 6**. **Figure 7** is a table of SOEP's total average gas rate by fiscal year.

FIGURE 5:
SOEP TOTAL GAS PRODUCTION BY FIELD EACH FISCAL YEAR

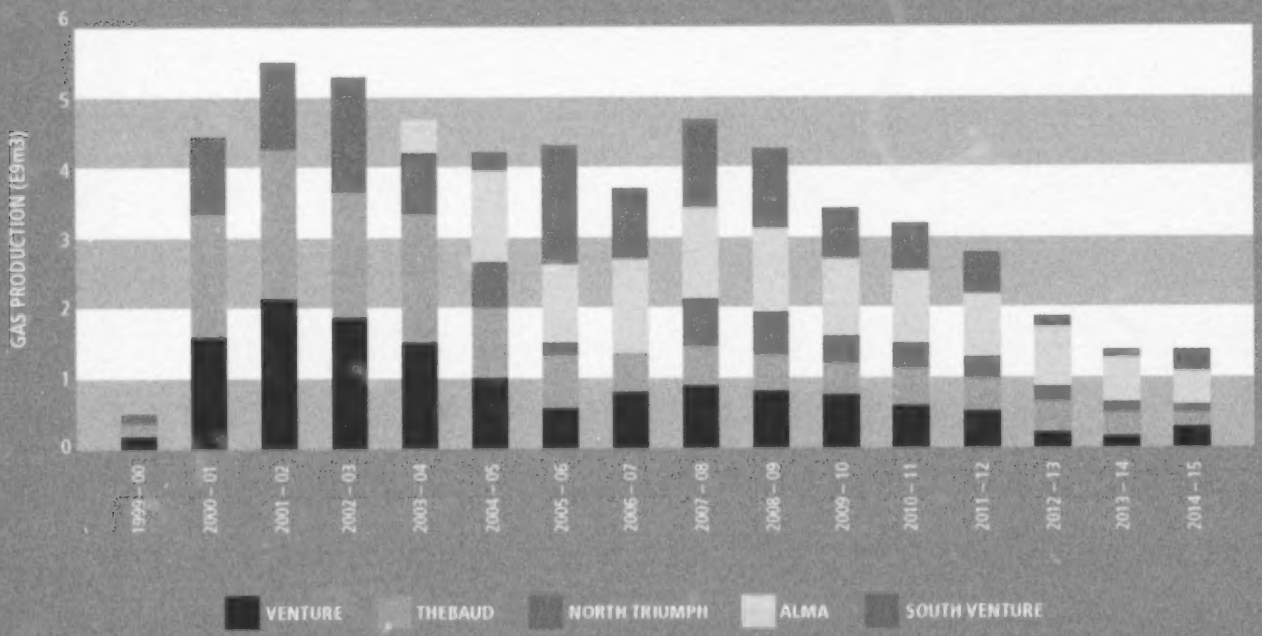
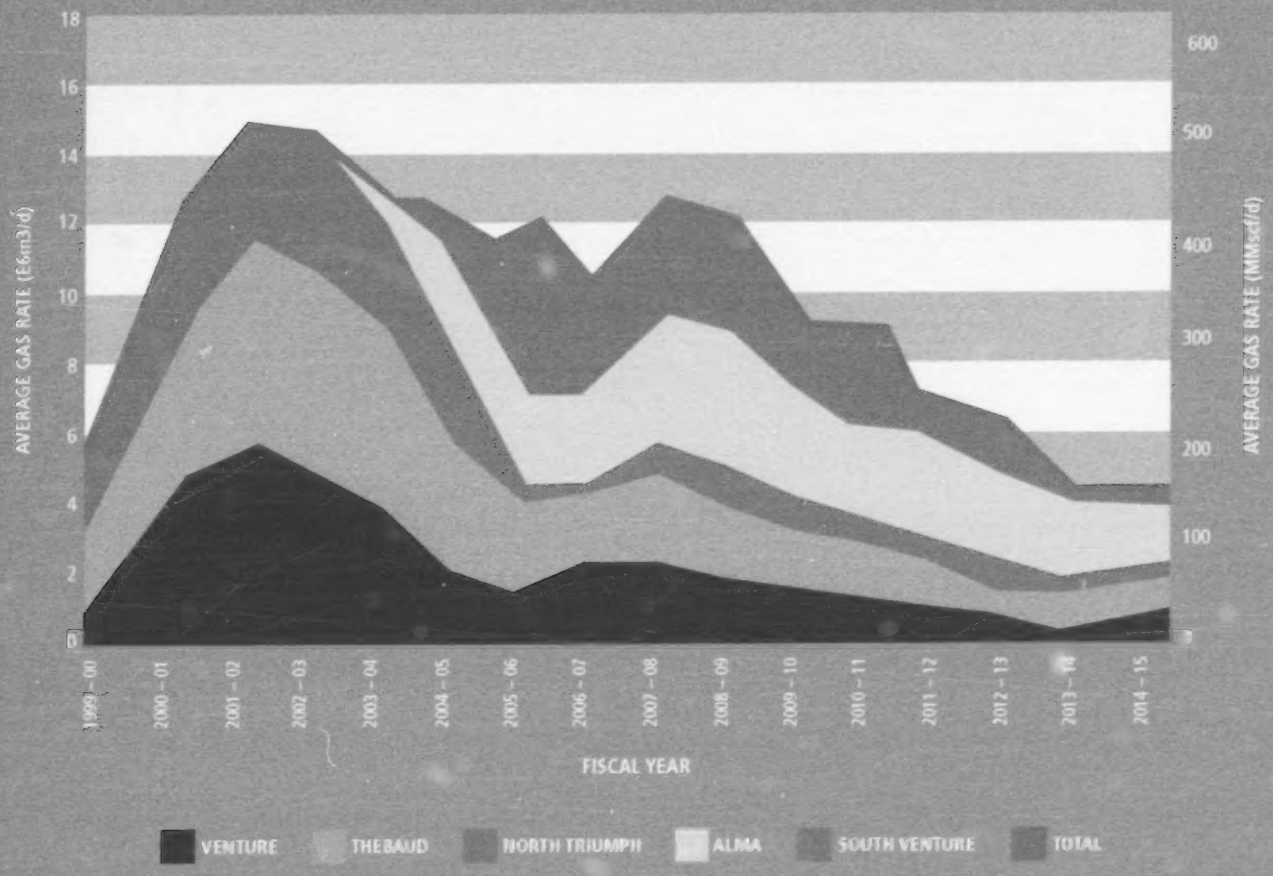


FIGURE 6:
SOEP AVERAGE GAS RATE EACH FISCAL YEAR



CNSOPB staff are continuing to monitor daily production and reservoir performance from the SOEP fields to ensure effective reservoir management strategies are in place.

FIGURE 7:
SOEP TOTAL AVERAGE GAS RATE EACH FISCAL YEAR

FISCAL YEAR	(E6m3/d)	(MMscf/d)
1999 – 00	4.7	167
2000 – 01	**12.0**	**425**
2001 – 02	15.2	536
2002 – 03	**14.4**	**509**
2003 – 04	12.8	452
2004 – 05	**11.3**	**400**
2005 – 06	11.5	406
2006 – 07	**10.3**	**362**
2007 – 08	12.9	456
2008 – 09	**12.2**	**431**
2009 – 10	9.3	329
2010 – 11	**8.7**	**308**
2011 – 12	7.5	264
2012 – 13	**5.0**	**177**
2013 – 14	4.1	144
2014 – 15	**4.1**	**144**

5.2 DEEP PANUKE

Staff is continuing to monitor daily production and reservoir performance from the Deep Panuke field to ensure effective reservoir management strategies are in place and to confirm compliance with regulatory requirements. A number of reservoir management documents were reviewed during the reporting period, including the annual update to the Deep Panuke Resource Management Plan amendments, Flow System Application and Flaring Plans.

CNSOPB staff have developed and maintain an independent reservoir simulation model of the Deep Panuke field to improve reservoir management oversight of the project. This model is updated, on a regular basis, using production data to enhance its accuracy.

During the reporting period, the Deep Panuke average daily production rate was 5.2 E6m3/d (185 MMscf/d). Total Deep Panuke gas production to March 31, 2015 was 3.1 E9m3 or 108.6 Bcf (Billion Cubic Feet). Deep Panuke total monthly production by well, since first gas in August 2013, is shown in **Figure 8**. The average monthly gas rate, for each well, is shown in **Figure 9**. **Figure 10** is a table of Deep Panuke total average gas rate by fiscal year.

5.3 GEOSCIENCE STUDIES & RESOURCE ASSESSMENTS

During the year, CNSOPB staff were involved in a number of provincial government initiatives related to Call for Bids NS14-1. This involved participation at conferences, technical sessions and industry meetings where staff presented the results of the CNSOPB's geoscience study of the Call for Bids NS14-1 area.

Staff completed a comprehensive geoscience study of the 2015 Call for Bids Forecast Area located on the western Scotian Shelf and Slope. The results of this study will be incorporated into the CNSOPB's Call for Bids NS15-1.

During the year, staff provided geoscience expertise and interpretations to the Nova Scotia Department of Energy and the Offshore Energy Research Association in support of their project to study the geology and hydrocarbon potential of the western Scotian margin near Georges Bank. Staff were also involved in a number of provincial geoscience research initiatives designed to improve the understanding of the offshore, which includes a study designed to evaluate the hydrocarbon generating potential of the sediments offshore Nova Scotia (source rock study).

FIGURE 8:
DEEP PANUKE TOTAL MONTHLY GAS PRODUCTION BY WELL TO MARCH 31, 2015

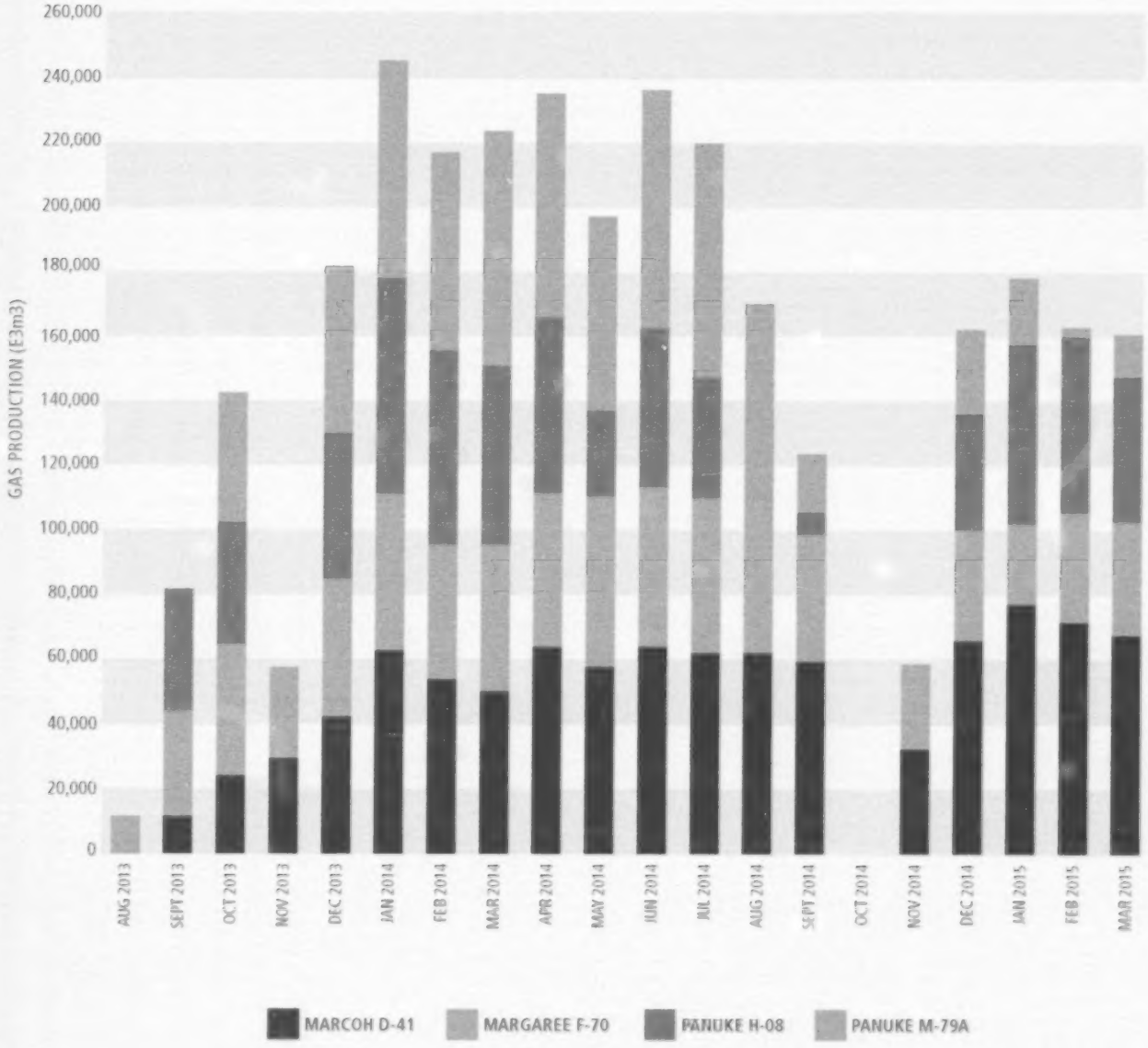


FIGURE 9:
DEEP PANUKE MONTHLY AVERAGE GAS RATE BY WELL TO MARCH 31, 2015

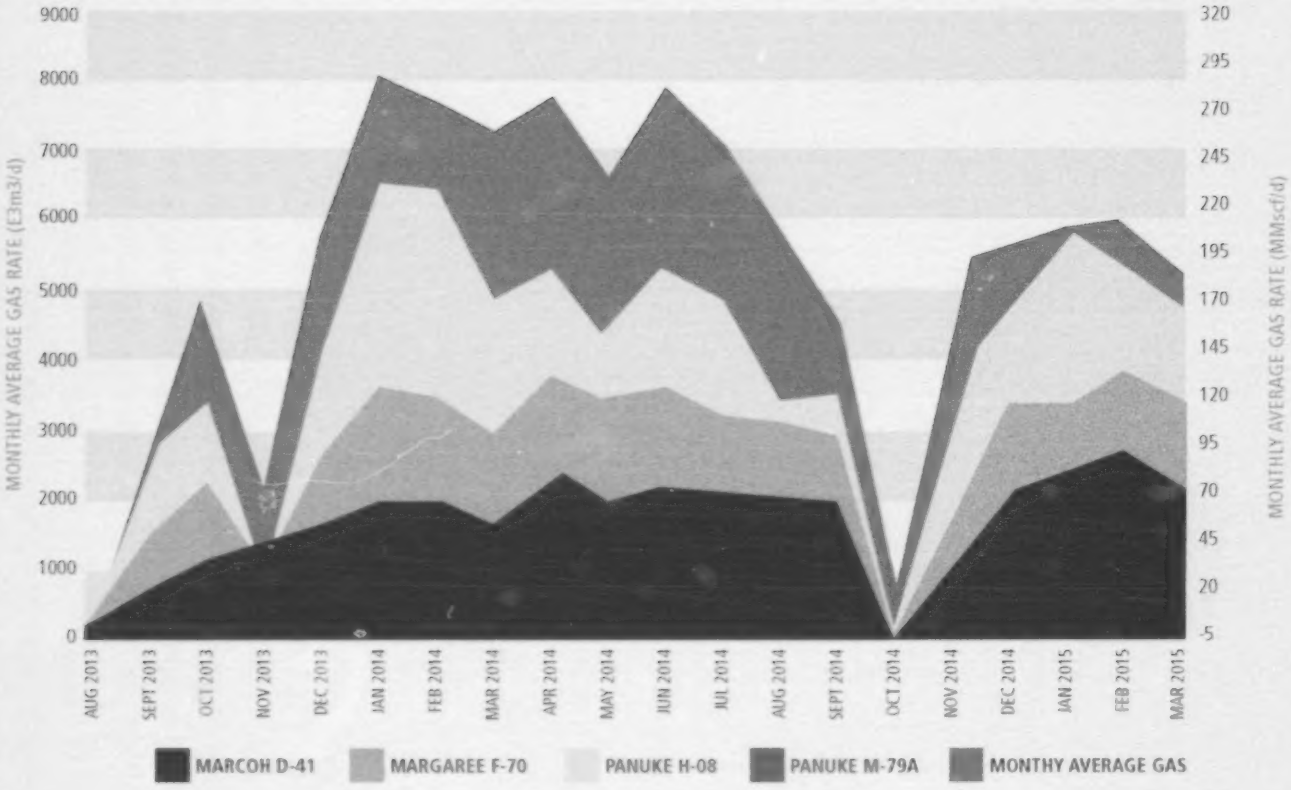
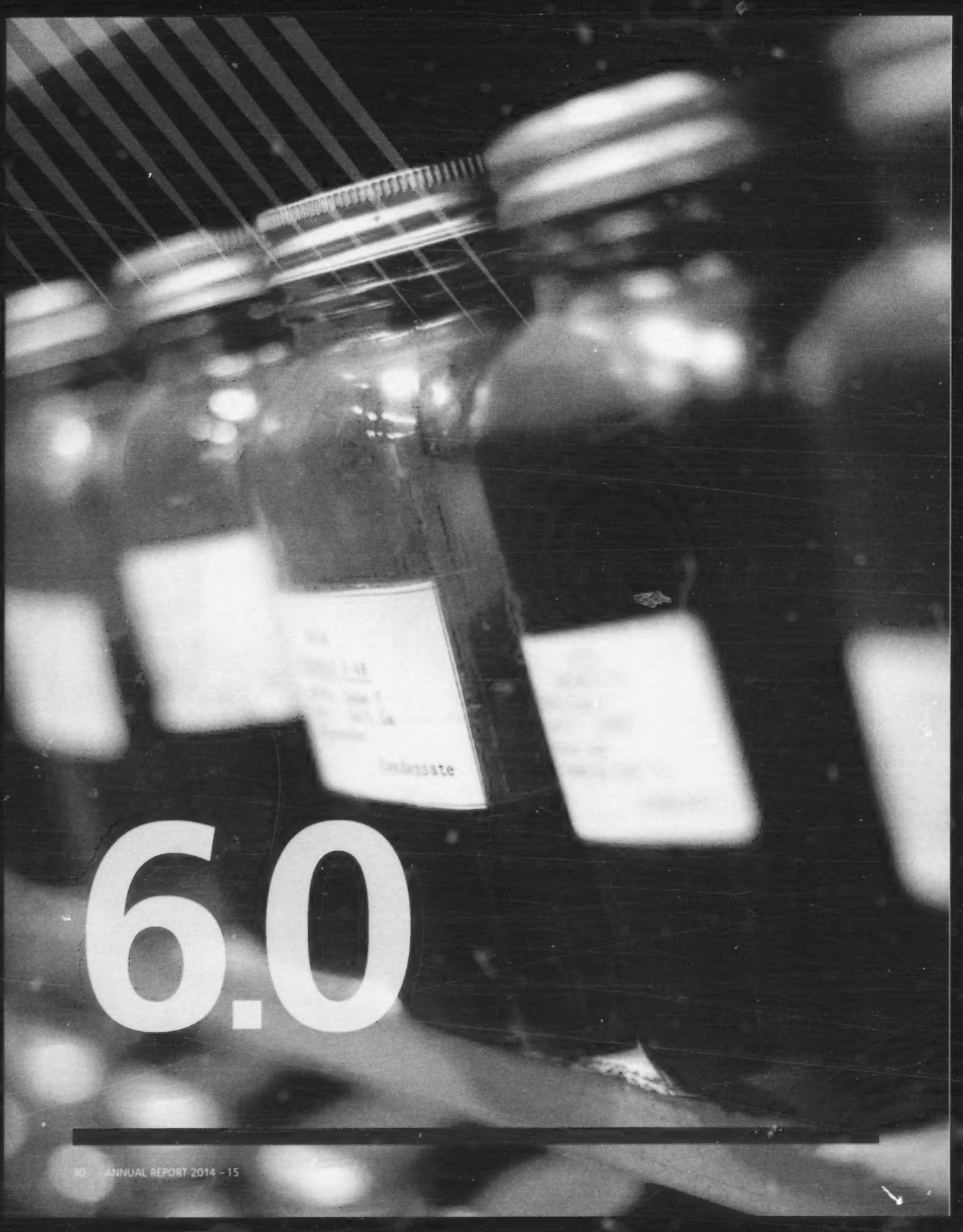


FIGURE 10:
DEEP PANUKE AVERAGE GAS RATE BY FISCAL YEAR

FISCAL YEAR	(E6m3/d)	(MMscf/d)
2013 – 14	4.8	169
2014 – 15	5.2	185



6.0

INDUSTRIAL BENEFITS 6.0

6.1 SABLE OFFSHORE ENERGY PROJECT (SOEP)

ExxonMobil Canada, the operator of the SOEP, files an annual benefits report with the CNSOPB. As stated in the report submitted to the CNSOPB for the period ending December 31, 2014, SOEP has spent $2.696 billion in Nova Scotia to date. $1.216 billion has been spent in the rest of Canada, with overall Canadian spending totaling $3.912 billion. Cumulatively, Nova Scotia person hours amounted to 23.13 million, while the rest of Canada totaled 3.55 million person hours.

2013–2017 SOEP Research & Development Plan

In 2011 the CNSOPB approved SOEP's Research and Development (R&D) Plan for the 2013–2017 period. Within this plan SOEP has committed to spend a minimum of $3 million over the five (5)-year period on eligible R&D initiatives, with no less than $375,000 to be spent in any individual year. A key initiative approved under this plan is the funding of a Centre of Excellence for Geoscience R&D at Dalhousie University. This initiative involves a cash grant contribution and provides Dalhousie researchers and their collaborators/co-authors access to the Sable Mega-Merge 3D seismic dataset.

SOEP owners and contractors estimate that in excess of $500,000 was spent on R&D initiatives in 2014.

6.2 DEEP PANUKE OFFSHORE GAS PROJECT

Encana Corporation, the operator of the Deep Panuke Offshore Gas Project, is required to file an annual benefits report with the CNSOPB. According to the report submitted to the CNSOPB for the period ending December 31, 2014, cumulative Nova Scotian person hours amounted to 5,077,901, while the rest of Canada totaled 836,355 person hours.

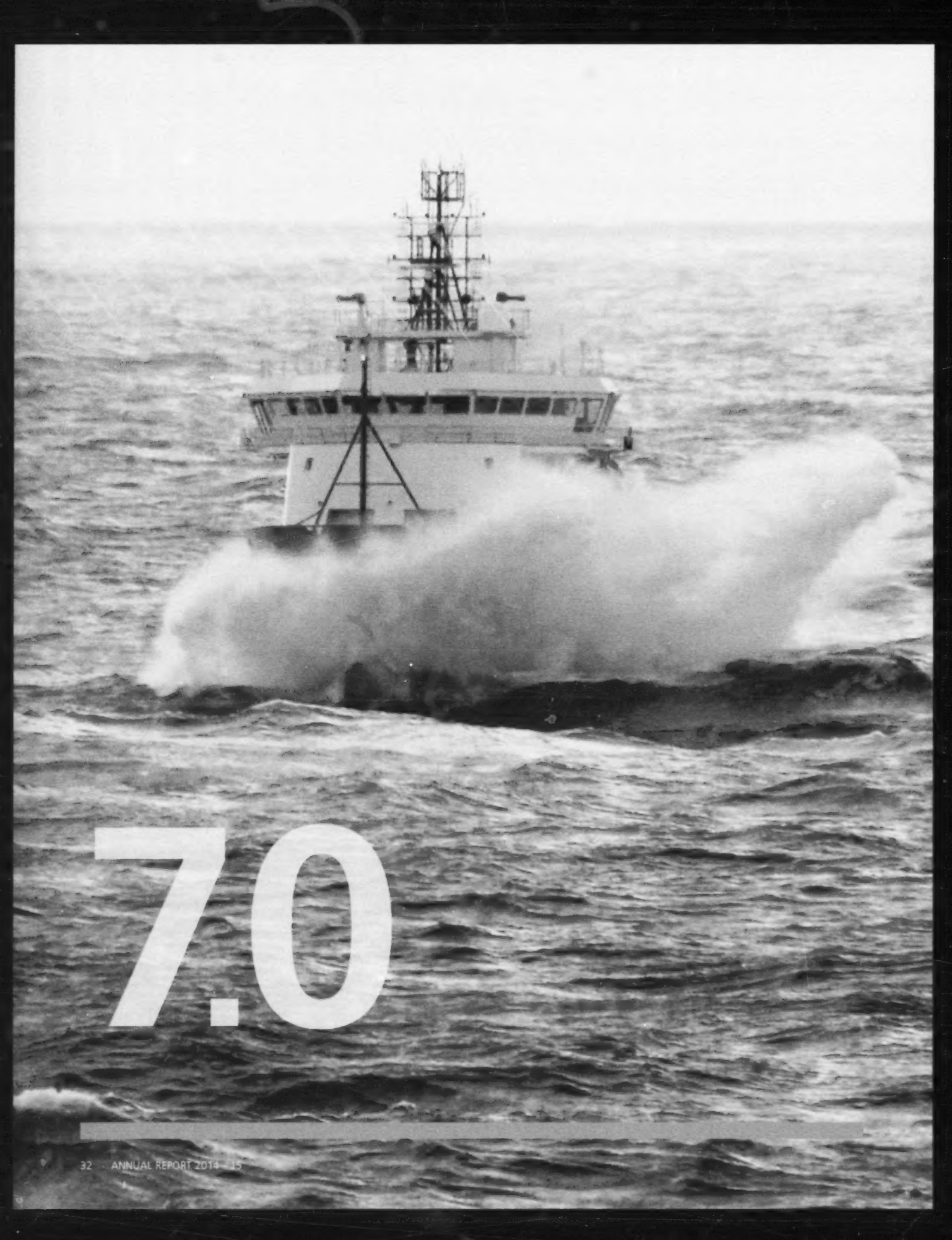
Deep Panuke Education & Training / Research & Development Fund

Encana Corporation has committed to spending a minimum of 0.5% of the gross revenues from Deep Panuke over the life of the project on eligible Education and Training (E&T) and R&D initiatives. During the development phase the funds available each year for E&T/R&D were based on 0.5% of allowable capital costs in the previous calendar year. For the first ten (10) years of production, a credit based on 10% of Encana Corporation's approved E&T/R&D expenditures from the development phase will be applied to Encana's annual commitment.

To date Encana estimates that $8.6 million has been spent on E&T/R&D initiatives under the Fund.

6.3 EXPLORATION

The CNSOPB monitored benefits activity related to exploration programs carried out by Shell Canada Limited and BP Exploration (Canada) Limited for compliance with legislative requirements and benefits plan commitments.



7.0

FINANCIAL STATEMENTS 7.0

Please go to **cnsopb.ns.ca/about-us/annual-report** for the 2014–15 Audited Financial Statements prepared by Levy Casey Carter MacLean.

8th floor TD Centre, 1791 Barrington Street
Halifax, NS, Canada B3J 3K9

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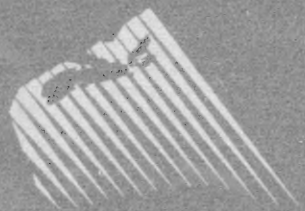

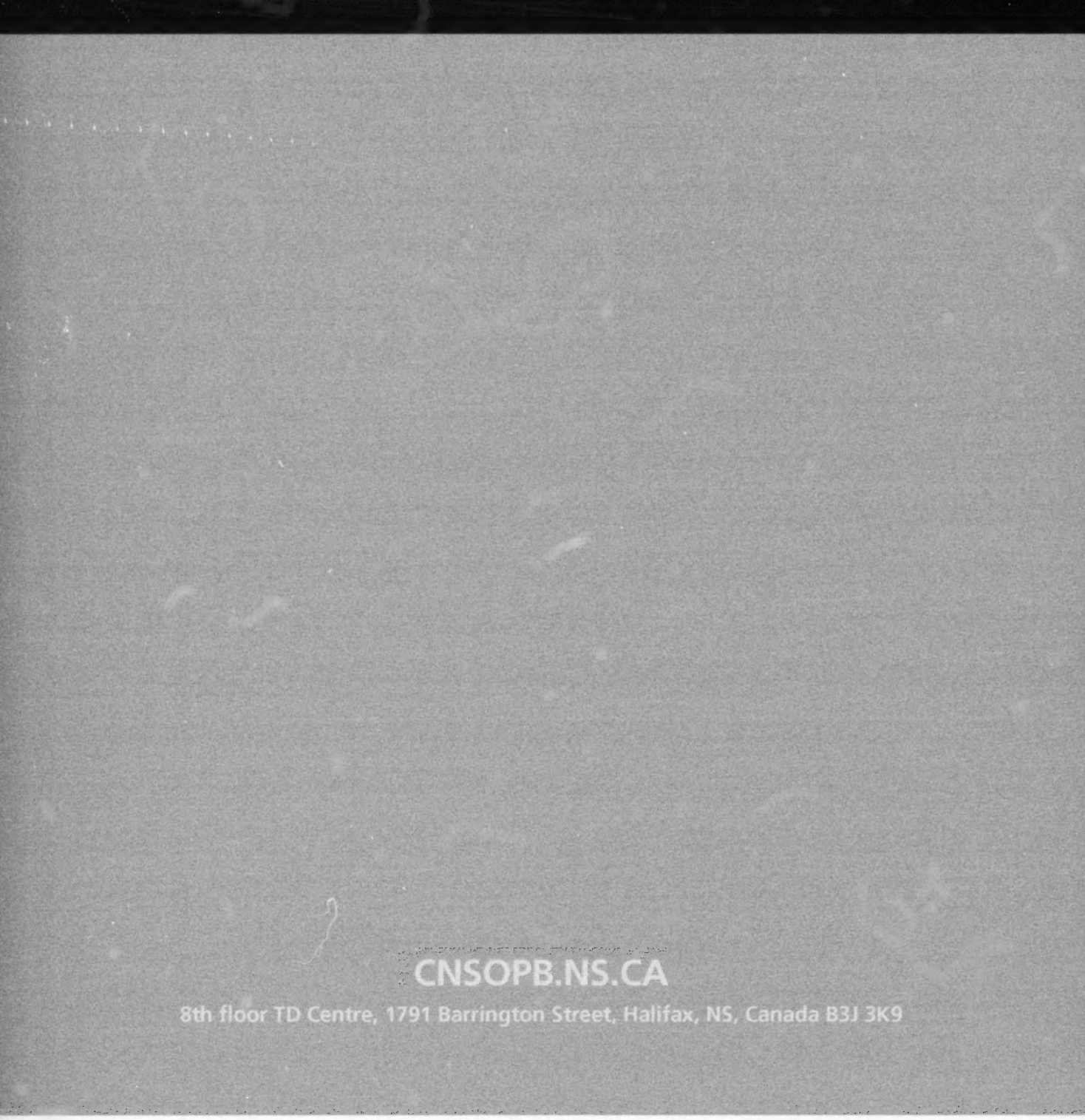

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